

IN THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims:

Claims 1 - 9 (cancelled).

1 10. (new) A fish scaling machine comprising upper
2 and lower conveyor means mounted on a machine frame to
3 convey fish bodies to be scaled while being held between
4 said conveyor means and moved in a conveyance direction,
5 water injection means to spray water onto scales of said
6 fish bodes on said conveyor means, said water injection
7 means having at least two rows of water injection nozzles
8 spaced in said conveyance direction to spray water onto
9 the same scale or scales of said fish body, in at least
10 two stages in accordance with the conveyance of said fish
11 bodies generally in said conveyance direction, said water
12 injection means further including water pressure
13 adjustment section to apply water onto said scales of
14 said fish body at a substantially uniform pressure from
15 each of said two rows of water injection nozzles in spite
16 of variation in the surface profile of said fish body to
17 be scaled.

1 11. (new) A fish scaling machine comprising upper
2 and lower conveyor means mounted on a machine frame to

3 convey fish bodies to be scaled while being held between
4 said conveyor means and moved in a conveyance direction,
5 water injection means to spray water onto scales of fish
6 bodies on said conveyor means, said water injection means
7 having at least two rows of water injection nozzles
8 spaced in said conveyance direction to continuously spray
9 water onto the same scale or scales of the fish body in
10 at least two stages in accordance with the conveyance of
11 said fish bodies in generally said conveyance direction,
12 said water injection means further including water
13 pressure adjustment section to apply water onto said fish
14 body at a uniform pressure from each of said rows of
15 water injection nozzles in spite of variation in the
16 surface profile of said fish body to be scaled and said
17 water injection nozzles of said at least two rows of
18 water injection nozzles being offset from each other in a
19 cross or width direction relative to said conveyance
20 direction.

1 12. (new) A fish scaling machine as set forth in
2 claim 10 or claim 11, wherein said water injection means
3 comprise upper and lower main water injection means
4 respectively located in positions corresponding to both
5 sides of said fish body and upper and lower auxiliary
6 water injection means located in positions corresponding
7 to the back and the belly of said fish body.

1 13. (new) A fish scaling machine as set forth in
2 claim 10 or claim 11, wherein the water pressure in said
3 at least two rows of water injection is different.

1 14. (new) A fish scaling machine as set forth in
2 claim 10 or claim 11, wherein each of said water
3 injection nozzles has a nozzle opening, and said water
4 pressure adjustment section provides a constant distance
5 from each of said nozzle openings of said injection
6 nozzles to respective surface portions of said fish body
7 so that the water sprayed from all the water injection
8 nozzles has the same pressure at the respective surface
9 portions of said fish body.

1 15. (new) A fish scaling machine as set forth in
2 claim 14, wherein said water injection adjustment section
3 provides said constant distance by selectively using a
4 plurality of water injection nozzles previously prepared
5 and having different lengths.

1 16. (new) A fish scaling machine as set forth in
2 claim 14, wherein said water injection adjustment section
3 provides said constant distance by selectively using a
4 plurality of water supply conduits having the water
5 injection nozzles mounted thereon and spaced in said

6 cross or width direction, said water supply conduits
7 being shaped to position each of said water injection
8 nozzles at the same distance from said fish body.

1 17. (new) A fish scaling machine as set forth in
2 claim 10 or claim 11, wherein said water pressure
3 adjustment section provides a water pressure adjustment
4 so that the water sprayed from all the water injection
5 nozzles has the same pressure at respective surface
6 portions of said fish body.

1 18. (new) A fish scaling machine as set forth in
2 claim 17, wherein said water injection adjustment section
3 includes pressure adjustment valves separately provided
4 between said respective water injection nozzles and said
5 pressure water supply source, and said pressure
6 adjustment valves have an output water pressure value
7 adjusted in accordance with the surface configuration of
8 said fish body.

1 19. (new) A fish scaling machine including upper
2 and lower conveyors mounted on a machine frame to convey
3 fish bodies to be scaled while being held between said
4 conveyors and moved in a conveyance direction, water
5 injection means for spraying water onto scales of said
6 fish bodies on said conveyors, said water injection means

7 having a plurality of rows of water injection nozzles
8 spaced in said conveyance direction to sequentially spray
9 water onto the same scale or scales of said fish body in
10 at least two stages as said fish bodies are moved by said
11 conveyors, said water injection means further including
12 water pressure adjustment means for contacting said
13 scales of said fish body with water at a substantially
14 uniform pressure from each of said two rows of water
15 injection nozzles in spite of variation in the surface
16 profile of said fish body to be scaled.

1 20. (new) A fish scaling machine as set forth in
2 claim 19, wherein said at least two stages occur at
3 spaced locations along said conveyance direction.

1 21. (new) A fish scaling machine as set forth in
2 claim 20, wherein said spray of water in a first stage of
3 said at least two stages moves said scale or scales to
4 angularly extend away from said fish bodies to expose a
5 rearward or inner side of said scale or scales, and said
6 spray of water in a second stage of said at least two
7 stages impinges said rearward or inner side of said
8 angularly extending scale or scales to remove the scale
9 or scales from said fish bodies.

1 22. (new) A fish scaling machine as set forth in
2 claim 21, wherein said water injection nozzles are offset
3 from each other in a cross or width direction relative to
4 said conveyance direction.

1 23. (new) A fish scaling machine as set forth in
2 claim 22, wherein the water pressure in said at least two
3 rows of water injection nozzles is different.

1 24. (new) A fish scaling machine as set forth in
2 claim 22 or 23, wherein said water sprayed from all of
3 said water injection nozzles has the same pressure at
4 said scale or scales.